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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/666,293	09/18/2003	John G. Crandall	OPT-03-001	9046
47022	7590	12/13/2005	EXAMINER	
THE LAW OFFICE OF RICHARD W. JAMES 25 CHURCHILL ROAD CHURCHILL, PA 15235			DAVIS, GEORGE B	
			ART UNIT	PAPER NUMBER
			2129	

DATE MAILED: 12/13/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/666,293	Applicant(s) CRANDALL ET AL.	
	Examiner George Davis	Art Unit 2129	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 18 September 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-8 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☐ Claim(s) 1-8 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Specification

1. The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed.

The following title is suggested: - - METHOD FOR SPECIFYING AND
SIMULATING ATTRIBUTES - -.

2. Applicant is reminded of the proper language and format for an abstract of the disclosure.

The abstract should be in narrative form and generally limited to a single paragraph on a separate sheet within the range of 50 to 150 words. It is important that the abstract not exceed 150 words in length since the space provided for the abstract on the computer tape used by the printer is limited. The form and legal phraseology often used in patent claims, such as "means" and "said," should be avoided. **The abstract should describe the disclosure sufficiently to assist readers in deciding whether there is a need for consulting the full patent text for details.**

The language should be clear and concise and should not repeat information given in the title. It should avoid using phrases which can be implied, such as, "The disclosure concerns," "The disclosure defined by this invention," "The disclosure describes," etc.

The abstract of the disclosure is objected to because the abstract fails to describe the disclosure sufficiently to assist readers in deciding whether there is a need for consulting the full patent text for details. Correction is required. See MPEP § 608.01(b).

Claim Rejections - 35 USC § 101

3. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claims 1-8 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. The language of claims 1-4 is directed merely to an abstract idea and mathematical algorithm that is not tied to a technological art, environment or machine which would result on a practical application producing a concrete, useful, and tangible result to form the basis of statutory subject matter under 35 U.S.C. 101. The language of claims 5-8 is directed merely to an abstract idea that is not tied to a technological art, environment or machine which would result on a practical application producing a concrete, useful, and tangible result to form the basis of statutory subject matter under 35 U.S.C. 101.

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-8 are rejected under 35 U.S.C. 102(b) as being anticipated by Linkens et al, "Design and Implementation of a Knowledge-Based Framework for the Modelling

and Simulation of Hybrid Systems", IEE International Conference on Control, Sep. 1996.

As per claim 1, Linkens discloses attributes of a variable to be optimized (attributes is created to be optimize, see page 529, second column, lines 13-15 and page 527, second column, line 16), selecting a base variable value (see page 529, first column, lines 12-19) specifying a high variable value as the base variable value plus a portion of the base variable value (this is a hybrid value that change from one state to another, see section 2.1) and specifying a low variable value as the base variable value minus a portion of the base variable value (this is a hybrid value that change from one state to another, see section 2.1).

As per claim 2, Linkens discloses the portion is greater than the base variable value (this is a hybrid value that change from one state to another, see section 2.1).

As per claim 3, Linkens discloses the portion is a percentage of the base variable value (comparing two value can establish a percentage, see section 2.1 last five lines).

As per claim 4, Linkens discloses specifying a design tolerance that is a minimum step that the variable will change during optimization (changing values during simulation in optimization process, see figure 5(b) "the rate of change").

As per claim 5, Linkens discloses specifying a model for simulation (see section 2), specifying fewer than all attributes of the model to be considered during simulation (see abstract, lines 14-20) and selecting one or more stored models having all attributes to be considered during simulation (attribute is stored in knowledge base, see page 528,

first column, lines 9-12).

As per claim 6, Linkens discloses searching stored models having all attributes to be considered during simulation for one or more models having attributes that match the specified attributes (matching the different variables in the attribute, see abstract).

As per claim 7, Linkens discloses comparing a value specified for a first attribute to values of that first attribute in the stored models and selecting each model having a first attribute value that matches the value specified for the first attribute (knowledge base that stores and specifies attributes with different variables, see abstract) and comparing a value specified for a second attribute to values of that second attribute in the selected models (knowledge base that stores and specifies attributes with different variables, see abstract) and further selecting each model having a second attribute value that matches the value specified for the second attribute (knowledge base that stores and specifies attributes with different variables, see abstract).

As per claim 8, Linkens discloses specifying an optimization strategy (attributes is created to be optimize, see page 529, second column, lines 13-15 and page 527, second column, line 16), specifying fewer than all attributes of the strategy to be followed during simulation (knowledge base that specifies attributes with different variables, see abstract) and selecting one or more stored strategies having all attributes to be followed during simulation (knowledge base that specifies attributes with different variables, see abstract).

Conclusion

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to George Davis whose telephone number is (571) 272-3683. The examiner can normally be reached on Monday through Friday from 10:00 am to 6:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Vincent, can be reached on (571) 272-3080. The fax phone number for the organization where this application or proceeding is assigned is (571) 273-3800.

December 8, 2005

A handwritten signature in black ink, appearing to read 'G. B. Davis', with a stylized flourish extending to the left.

GEORGE B. DAVIS

PRIMARY PATENT EXAMINER